

Manufacturing Tolerances

Units of Measure: Inches

Standard Shop Tolerances

Process	Prototype	Progressive Tool	Precision	Machining
			Sheet Metal	
Hole to Hole	0.005	0.003	+/- 0.005	+/- 0.002
Edge to Hole	0.010	0.005	+/- 0.005	+/- 0.005
Edge to Edge	0.010	0.003	+/- 0.005	+/- 0.005
Hole Size	+/- 0.004	+/- 0.002	+/- 0.005	+/- 0.002
Form to Hole	0.010	0.005	+/- 0.010	N/A
Form to Edge	0.010	0.005	+/- 0.010	N/A
Form to Form	0.015	0.010	+/- 0.010	N/A
Form Angle	+/- 2 Deg	+/- 1 Deg	+/- 2 Deg	+/- 1/2 Deg
True Position				0.015
Surface Finish				63 RMA

Tightest Shop Tolerances

Process	Prototype	Precision	Machining
		Sheet Metal	
Hole to Hole	0.005	+/- 0.005	+/- 0.001
Edge to Hole	0.005	+/- 0.005	+/- 0.002
Edge to Edge	0.005	+/- 0.005	+/- 0.002
Hole Size	0.004	+/- 0.003	0.001
Form to Hole	0.010	+/- 0.005	N/A
Form to Edge	0.010	+/- 0.005	N/A
Form to Form	0.015	+/- 0.010	N/A
Form Angle	+/- 2 Deg	+/- 1 Deg	+/- 1/4 Deg
True Position			0.008
Surface Finish			32 RMA